

IN THE CLAIMS:

~~The text of the following claims (including withdrawn claims) is set forth below. Cancelled~~
~~claims are indicated by a horizontal line through the text of the claim. The claims~~
~~are numbered in the order in which they were filed. The text of each~~
~~claim is preceded by the word "claim," (currently amended), (previously amended), (new),~~
~~(withdrawn), (not entered).~~

Please ADD new claims 26-28 in accordance with the following:

1. (original) A moving picture encoder, which divides an image in each frame of moving picture into a plurality of blocks and performs an encoding process on each block, comprising:
a coding unit performing an intra-frame coding process or an inter-frame coding process on given data; and
an information amount reduction unit reducing an amount of information about given data, wherein
for a plurality of consecutive frames containing a first frame, said coding unit performs the intra-frame coding process on each block, and said information amount reduction unit reduces an amount of information about data coded by said coding unit; and
for frames subsequent to the plurality of frames, said coding unit adaptively performs the intra-frame coding process or the inter-frame coding process on each block.

Canceled
2. (withdrawn) A moving picture encoder, which divides an image in each frame of moving picture into a plurality of blocks and performs an encoding process on each block, comprising:
a coding unit performing an intra-frame coding process or an inter-frame coding process on given data;
an information amount reduction unit reducing an amount of information about given data; and
a detection unit detecting a discontinuous point in input moving picture, wherein
for a plurality of consecutive frames containing a frame immediately after said detection unit detects the discontinuous point, said coding unit performs the intra-frame coding process on each block, and said information amount reduction unit reduces an amount of information about data coded by said coding unit; and

for frames subsequent to the plurality of frames, said coding unit adaptively performs the intra-frame coding process or the inter-frame coding process on each block.

3. (original) The encoder according to claim 1, wherein
said information amount reduction unit reduces the amount of information in each block
by lowering spatial resolution of an image in the plurality of frames.

4. (original) The encoder according to claim 1, further comprising
an information amount adjustment unit stepwise increasing an amount of information in
each block for frames subsequent to the plurality of frames from a state in which said
information amount reduction unit has reduced the amount of information.

5. (original) The encoder according to claim 4, wherein
said information amount adjustment unit stepwise raises the spatial resolution of an
image in frames subsequent to the plurality of frames.

6. (original) The encoder according to claim 1, further comprising
a transform unit orthogonally transforming coded data obtained by said coding unit,
wherein
said information amount reduction unit outputs only data of a direct current element
among data of frequency elements generated by said transform unit.

7. (original) The encoder according to claim 6, wherein
said information amount adjustment unit stepwise extends a range of a frequency of data
of an AC element to be selected and outputted among data of frequency elements generated by
said transform unit for frames subsequent to the plurality of frames.

canceled
8. (~~withdrawn~~) The encoder according to claim 1, wherein
said information amount reduction unit down-samples image data for the plurality of
frames.

canceled
9. (~~withdrawn~~) The encoder according to claim 1, further comprising
a transform unit orthogonally transforming coded data obtained by said coding unit,
wherein

said information amount reduction unit down-samples image data, and outputs only data of a direct current element among data of frequency elements generated by said transform unit.

Cancelled
10. ~~(withdrawn)~~ A moving picture encoder, which divides an image in each frame of moving picture into a plurality of blocks and performs an encoding process on each block, comprising:

a coding unit performing an intra-frame coding process on input data when a first signal is received, and adaptively performing an intra-frame coding process or an inter-frame coding process on input data when a second signal is received;

an information amount reduction unit reducing an amount of information about data coded by said coding unit when a third signal is received; and

a controller generating the first and the third signals for a plurality of consecutive frames containing a first frame, and generating the second signal for frames subsequent to the plurality of frames.

Cancelled
11. ~~(withdrawn)~~ A moving picture encoder, which encodes image data in each frame of moving picture, comprising:

a coding unit performing an intra-frame coding process or an inter-frame coding process on given data; and

an information amount reduction unit reducing an amount of information about given data, wherein

for a plurality of consecutive frames containing a first frame, said coding unit performs the intra-frame coding process, and said information amount reduction unit reduces an amount of information about data coded by said coding unit; and

for frames subsequent to the plurality of frames, said coding unit adaptively performs the intra-frame coding process or the inter-frame coding process.

Cancelled
12. ~~(withdrawn)~~ A moving picture encoder, which divides an image in each frame of moving picture into a plurality of blocks and performs a coding process on each block, comprising:

a coding unit performing an intra-frame coding process or an inter-frame coding process on given data;

an information amount reduction unit reducing an amount of information about given data; and

a controller generating a signal for performing by said coding unit an intra-frame coding process on a plurality of consecutive frames containing a first frame, generating a signal for reducing an amount of information in one or more frames among the plurality of frames by said information amount reduction unit, and generating a signal for adaptively performing by said coding unit an intra-frame coding process or an inter-frame coding process on frames subsequent to the plurality of frames.

13. ~~canceled~~ (withdrawn) A moving picture encoder, which divides an image in each frame of moving picture into a plurality of blocks and performs an encoding process on each block, comprising:

a coding unit performing an intra-frame coding process on input data when a first signal is received, and adaptively performing an intra-frame coding process or an inter-frame coding process on input data when a second signal is received;

an information amount reduction unit reducing an amount of information about data coded by said coding unit when a third signal is received;

a detection unit detecting a discontinuous point in input moving picture; and

a controller generating the first and the third signals for a plurality of consecutive frames containing a frame immediately after said detection unit detects a discontinuous point, and generating the second signal for frames subsequent to the plurality of frames.

14. ~~canceled~~ (withdrawn) A moving picture encoder, which encodes image data in each frame of moving picture, comprising:

a coding unit performing an intra-frame coding process or an inter-frame coding process on given data;

an information amount reduction unit reducing an amount of information about given data; and

a detection unit detecting a discontinuous point in input moving picture, wherein

for a plurality of consecutive frames containing a frame immediately after said detection unit detects the discontinuous point, said coding unit performs the intra-frame coding process, and said information amount reduction unit reduces an amount of information about data coded by said coding unit; and

for frames subsequent to the plurality of frames, said coding unit adaptively performs the intra-frame coding process or the inter-frame coding process.

Cancelled

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15. ~~(withdrawn)~~ A moving picture encoder, which divides an image in each frame of moving picture into a plurality of blocks and performs an encoding process on each block, comprising:

a coding unit performing an intra-frame coding process or an inter-frame coding process on given data;

an information amount reduction unit reducing an amount of information about given data;

a detection unit detecting a discontinuous point in input moving picture; and

a controller generating a signal for performing by said coding unit an intra-frame coding process on a plurality of consecutive frames containing a frame

immediately after said detection unit detects a discontinuous point, generating a signal for reducing an amount of information in one or more frames among the plurality of frames by said information amount reduction unit, and generating a signal for adaptively performing by said coding unit an intra-frame coding process or an inter-frame coding process on frames subsequent to the plurality of frames.

Cancelled

16. ~~(withdrawn)~~ A moving picture decoder, which decodes data coded by an encoder, wherein

said encoder divides an image in each frame of moving picture into a plurality of blocks, performs an intra-frame coding process for each block on a plurality of consecutive frames containing a first frame, and adaptively performs an intra-frame coding process or an inter-frame coding process for each block on frames subsequent to the plurality of frames; and

said moving picture decoder comprises:

an error detection unit detecting a transmission error for each block or for a plurality of blocks; and

a concealment unit concealing an error, when the error is detected in a first frame by said error detection unit, using an image in another block in the first frame, and concealing an error, when the error is detected in a subsequent frame, using an image in a frame immediately before a frame in which the error has been detected.

Cancelled

17. ~~(withdrawn)~~ A moving picture decoder, which decodes data coded by an encoder, wherein

said encoder divides an image in each frame of moving picture into a plurality of blocks, performs

an intra-frame coding process for each block on N consecutive frames containing a first frame, and adaptively performs an intra-frame coding process or an inter-frame coding process for each block on frames subsequent to the N frames; and

said moving picture decoder comprises:

an error detection unit detecting a transmission error for each block or for a plurality of blocks; and

a concealment unit concealing an error, when the error is detected in any of M frames containing a first frame by said error detection unit, using an image in another block in the frame in which the error has been detected, and concealing an error, when the error is detected in a subsequent frame, using an image in a frame immediately before the frame in which the error has been detected (N and M are natural numbers, and $N > M$).

Canceled

18. (withdrawn) A moving picture decoder, which decodes data coded by an encoder, wherein

said encoder divides an image in each frame of moving picture into a plurality of blocks, performs an intra-frame coding process for each block on a plurality of consecutive frames containing a frame immediately after a discontinuous point is detected in input moving picture, and adaptively performs an intra-frame coding process or an inter-frame coding process for each block on frames subsequent to the plurality of frames; and

said moving picture decoder comprises:

a first detection unit detecting a transmission error for each block or for a plurality of blocks;

a second detection unit detecting a discontinuous point in input moving picture; and

a concealment unit concealing an error, when said first detection unit detects the error in a frame immediately after said second detection unit detects a discontinuous point, using an image in another block in the frame in which the error has been detected, and concealing an error, when the error has been detected in the subsequent frames, using an image in a frame immediately before the frame in which the error has been detected.

Canceled
19. (withdrawn) A moving picture transmission system, in which an encoder divides an image in each frame of moving picture into a plurality of blocks and performs a coding process for each block, and a decoder decodes the coded data, wherein

said encoder comprises:

a coding unit performing an intra-frame coding process or an inter-frame coding process on given data; and

an information amount reduction unit reducing an amount of information about given data, wherein

for a plurality of consecutive frames containing a first frame, said coding unit performs the intra-frame coding process on each block, and said information amount reduction unit reduces an amount of information about data coded by said coding unit; and for frames subsequent to the plurality of frames, said coding unit adaptively performs the intra-frame coding process or the inter-frame coding process on each block,

said decoder comprises:

an error detection unit detecting a transmission error for each block or for a plurality of blocks; and

a concealment unit concealing an error, when the error is detected in a first frame by said error detection unit, using an image in another block in the first frame, and concealing an error, when the error is detected in a subsequent frame, using an image in a frame immediately before a frame in which the error has been detected.

20. (original) A moving picture coding method of dividing an image in each frame of moving picture into a plurality of blocks and performing an encoding process on each block, comprising:

performing an intra-frame coding process on each block for a plurality of consecutive frames containing a first frame;

reducing an amount of information about the encoded data for the plurality of frames;

and

adaptively performing the intra-frame coding process or an inter-frame coding process on each block for frames subsequent to the plurality of frames.

Canceled

21. ~~(withdrawn)~~ A moving picture coding method of dividing an image in each frame of moving picture into a plurality of blocks and performing an encoding process on each block, comprising:

- detecting a discontinuous point in input moving picture;
- performing an intra-frame coding process on each block for a plurality of consecutive frames containing a frame immediately after the discontinuous point is detected;
- reducing an amount of information about the encoded data for the plurality of frames;
- and
- adaptively performing the intra-frame coding process or the inter-frame coding process on each block for frames subsequent to the plurality of frames.

Canceled

22. ~~(withdrawn)~~ A moving picture coding/decoding method of dividing an image in each frame of moving picture into a plurality of blocks, performing an encoding process on each block, and decoding the coded data, comprising:

- performing an intra-frame coding process on each block for a plurality of consecutive frames containing a first frame;
- reducing an amount of information about the encoded data for the plurality of frames;
- adaptively performing the intra-frame coding process or an inter-frame coding process on each block for frames subsequent to the plurality of frames;
- concealing an error, when the error is detected in the first frame, using an image in another block in the first frame; and
- concealing an error, when the error is detected in subsequent frames, using an image in a frame immediately before the frame in which the error has been detected.

Canceled

23. ~~(withdrawn)~~ A moving picture coding/decoding method of dividing an image in each frame of moving picture into a plurality of blocks, performing an encoding process on each block, and decoding the coded data, comprising:

- detecting a discontinuous point in input moving picture;
- performing an intra-frame coding process on each block for a plurality of consecutive frames containing a frame immediately after the discontinuous point is detected;
- reducing an amount of information about the encoded data for the plurality of frames;
- adaptively performing the intra-frame coding process or an inter-frame coding process on each block for frames subsequent to the plurality of frames;
- generating moving picture by decoding the coded data;

concealing an error, when the error is detected in a frame immediately after the discontinuous point is detected, using an image in another block in the frame in which the error has been detected; and

concealing an error, when the error is detected in subsequent frames, using an image in a frame immediately before the frame in which the error has been detected.

24. (original) A moving picture encoder, which divides an image in each frame of moving picture into a plurality of blocks and performs an encoding process on each block, comprising:

coding means for performing an intra-frame coding process or an inter-frame coding process on given data; and

information amount reduction means for reducing an amount of information about given data, wherein

for a plurality of consecutive frames containing a first frame, said coding means performs the intraframe coding process on each block, and said information amount reduction means reduces an amount of information about data coded by said coding means; and

for frames subsequent to the plurality of frames, said coding means adaptively performs the intra-frame coding process or the inter-frame coding process on each block.

Canceled
25. ~~(withdrawn)~~ A moving picture encoder, which divides an image in each frame of moving picture into a plurality of blocks and performs an encoding process on each block, comprising:

coding means for performing an intra-frame coding process or an inter-frame coding process on given data;

information amount reduction means for reducing an amount of information about given data; and

detection means for detecting a discontinuous point in input moving picture, wherein

for a plurality of consecutive frames containing a frame immediately after said detection means detects the discontinuous point, said coding means performs the intra-frame coding process on each block, and said information amount reduction means reduces an amount of information about data coded by said coding means; and

for frames subsequent to the plurality of frames, said coding means adaptively performs the intra-frame coding process or the inter-frame coding process on each block.

26. (new) A moving picture encoder, which divides an image in each frame of moving picture into a plurality of blocks and performs an encoding process on each block, comprising:
a single coding unit selectively performing an intra-frame coding process or an inter-frame coding process on input data; and
an information amount reduction unit reducing an amount of information of supplied data,
and
wherein for a plurality of consecutive frames containing a first frame, said coding unit performs the intra-frame coding process on each block, and said information amount reduction unit reduces an amount of information of the data intra-frame coded by said coding unit, and for frames subsequent to the plurality of consecutive frames, said coding unit adaptively switching between performing one of the intra-frame coding process and inter-frame coding process on each block.

27. (new) A moving picture encoder method, which divides an image in each frame of moving picture into a plurality of blocks and performs an encoding process on each block, said method comprising:
intra-frame coding consecutive frames including a first frame;
performing data reduction on the encoded consecutive frames; and
adaptively switching between the intra-frame coding and inter-frame coding for frames subsequent to the consecutive frames.

28. (new) A moving picture encoder method, which divides an image in each frame of moving picture into a plurality of blocks and performs an encoding process on each block, said method comprising:
intra-frame coding consecutive frames including a first frame using a single coding unit;
performing data reduction on the encoded consecutive frames; and
adaptively switching between the intra-frame coding and inter-frame coding for frames subsequent to the consecutive frames using the single coding unit.